



**Sit. Rep. #05**  
**8 February 2009**  
**US AMLR Vessel Survey (*R/V Yuzhmorgeologiya*)**  
**South Shetlands, Antarctica**

1. The *R/V Yuzhmorgeologiya* departed Punta Arenas, Chile on 6 Feb 2009 at 0900 hours en route to the South Orkney Islands, Antarctica. This is the second and final leg of the 2009 AMLR field season, and will consist of intensive sampling of finfish, benthic invertebrates, net and acoustically derived krill density and indices of abundance, and seafloor video transect deployments to characterize seafloor habitat and invertebrate communities. Sampling will be primarily within the 500 m isobath of the South Orkney Islands. Additional net and video deployments will be made to 800 m, as well as at selected sites near the Antarctic Peninsula.

2. Seventeen scientists are participating in this expedition. They are:

C. Jones, SWFSC, chief scientist  
T. Cossio, SWFSC, acoustics  
M. Damerau, Johann-Heinrich von Thünen Inst., Germany, finfish  
K. Deitrich, NOAA Contractor, finfish  
R. Driscoll, NOAA Contractor, benthic, krill  
J. Gafney, UCSC, fatty acid/lipids  
A. Hoek, Sea Technology Services, S. Africa, phys. oceanography, video  
K-H Kock, Institut für Seefischerei, Germany, finfish  
K. Kuhn, Yale, finfish  
E. Lazo-Wasem, Yale, benthic  
S. Lockhart, NOAA Contractor, benthic  
J. Moore, Florida Atlantic University, finfish  
T. Morgan, ODU, CQFE, finfish  
T. Near, Yale, finfish  
J. Pennington, Yale, finfish  
S. Schöling, Institut für Seefischerei, Germany, finfish  
N. Wilson, UCSD, SIO, benthic

3. The ship is outfitted with a commercial size bottom trawl and net sonar system for demersal fish and benthic invertebrate sampling. The ship's EK-60 echosounder will collect information on krill acoustic density and distribution, along with IKMT trawl deployments to characterize krill length frequency composition. A digital underwater video system will be deployed across contrasting seafloor habitats to visually characterize benthic invertebrate communities and collect direct evidence of Vulnerable Marine Ecosystems (VMEs) that will potentially be included in the CCAMLR registry of Southern Ocean VMEs. Instruments to measure physical seawater properties and meteorological conditions will also be deployed.

4. We are currently south of the Antarctic Convergence in Drake passage. Weather and sea state are currently favorable, spirits are high, and we are making good progress toward the northern coast of Coronation Island. We anticipate arriving at our first station on the morning of 9 February, 2009.

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Report submitted by AMLR researchers aboard the *R/V Yuzhmorgeologiya*, conducting surveys of the pelagic ecosystem in the peninsula region of the Antarctic. These reports are posted at <http://swfsc.noaa.gov/aerd-field.aspx>; blogs from the field are also posted at the same website. Photos by M. Goebel (NMFS/AERD).